



CERN Colloquium

SPEAKER: **Giorgio Gratta** (Physics Dept, Stanford University)
TITLE: **Neutrinos from Hell: the Dawn of Neutrino Geophysics**
DATE: Thu 25/11/2010 16:30
PLACE: Main Auditorium

ABSTRACT

Seismic waves have been for long time the only messenger reporting on the conditions deep inside the Earth. While global seismology provides amazing details about the structure of our planet, it is only sensitive to the mechanical properties of rocks and not to their chemical composition. In the last 5 years KamLAND and Borexino have started measuring anti-neutrinos produced by Uranium and Thorium inside the Earth. Such "Geoneutrinos" double the number of tools available to study the Earth's interior, enabling a sort of global chemical analysis of the planet, albeit for two elements only. I will discuss the results of these new measurements and put them in the context of the Earth Sciences."

Organised by: Ignatios Antoniadis/PH-TH and Maria
SPIROPULU/PH-EP.....Tea and
Coffee will be served at 16:00